



UK Hydrographic  
Office

EAtHC I 6 UK National Report

# UNITED KINGDOM NATIONAL REPORT

TO THE

16<sup>th</sup> EASTERN ATLANTIC

HYDROGRAPHIC COMMISSION MEETING (EAtHC)

29 September – 1 October 2021 | Lisbon

This report supplements the UK Generic National Report, posted on the UKHO website

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## **1. UK HYDROGRAPHIC OFFICE (UKHO)**

### **UK Delivery of Hydrographic Services**

**1.1** The UK delivery of hydrographic services is described in the UK Generic National Report; it is worth highlighting, however, the close liaison which exists between UK's Hydrographic Office (UKHO) and UK's maritime administration Maritime & Coastguard Agency in providing a coordinated approach to hydrographic and maritime safety representation both nationally and internationally.



### **UKHO Governance and Targets**

**1.2** This is described in the [UK Generic National Report](#) to the IHO.<sup>1</sup>

### **UKHO Organisation**

**1.3** Details of the UKHO's organisation are provided in the UK Generic National Report (Section 1) together with general contact details. Specific contact details relevant to the EAtHC region are included at the end of this Report.

### **Production Systems**

**1.4** This is described in the UK Generic National Report.

### **Cooperation and Partnerships**

**1.5** The UK is committed to collaborative partnerships through bilateral arrangements, developed in co-operation with other international government hydrographic authorities and data providers, covering a range of topics, including the use/re-use of data protected by copyright and intellectual property rights of those authorities. These also promote other forms of co-operation between the participants, helping to enhance international maritime safety and protection of the environment.

## **2. REGIONAL ACTIVITY**

### **UK Overseas Territories Programme**

**2.1** The UKHO continues to run the government funded Overseas Territories Seabed Mapping Programme (OTSMP), which is reviewing the status of hydrography within the UK Overseas Territories (OTs) and assessing and redressing the deficit of bathymetric data and lack of sound hydrographic governance. The programmes continue to highlight the importance and utility, both locally and within UK government, of Hydrography and the wider blue economy within the context of the UK OTs. Despite current restrictions as a result of COVID-19, the UKHO is continuing to plan and deliver Programme activity in several UK OTs through to 2021, as well as working with OTs to ensure their compliance with the Hydrographic elements of SOLAS. The programme is now in its sixth year and has seen recent completion of an airborne lidar survey in Bermuda which captured bathymetry data in Bermuda's coastal waters down to approximately 40m water depth, and an acoustic multibeam survey in the Falkland Islands of several high priority areas.

### **Commonwealth Marine Economies Programme**

**2.2** The UK Government's CME Programme aims to support the sustainable economic growth of SIDS by maximizing the potential of their marine resources, helping to improve their resilience to climate change and natural disasters, protect their environment and food security, and ultimately improve the livelihood of local communities. Now entering its final year, the UKHO recently delivered three lots of 2-week remote multibeam survey continuation training courses. We are now in discussions regarding possible continuation of the programme.

### **Survey and Capacity Building**

**2.3** Details of the management of civil hydrographic surveys in UK Home Waters are provided in the

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<sup>1</sup>. This will be updated in the course of 2021.

UK Generic National Report, and on the UKHO website. UK's National Hydrographic Committee (known as the Civil Hydrography Annual Seminar (CHAS) meets on an annual basis and provides the necessary breadth of interests to ensure that all surveying requirements are considered when prioritising the work of the Civil Hydrography Programme (CHP).

**2.4** In total, UKHO survey operations under the OTSMP and CME programme have covered a combined area of nearly 20,000KM<sup>2</sup> around the world.

**2.5** The UK continues to explore how we can strengthen the relationship with countries for which we are the Primary Charting Authority (PCA). We have increased our level of engagement to better understand prioritised requirements in the EAthC region.

**2.6** Any requests for survey assistance from nations within this RHC region will be considered. The UKHO has a dedicated team of specialists that manage the portfolio of survey and hydrographic development programmes. In addition to survey advice, the team are configured to provide support and advice in the development of hydrographic governance and identifying funding. Further information can be obtained from ([hydrographicprogrammes@UKHO.gov.uk](mailto:hydrographicprogrammes@UKHO.gov.uk)).

### 3. CHARTS

**3.1** UK's Generic National Report provides information on UK's portfolio of chart products and services. The following paragraphs provide information specifically relevant to the EAthC region.



#### Paper Charts

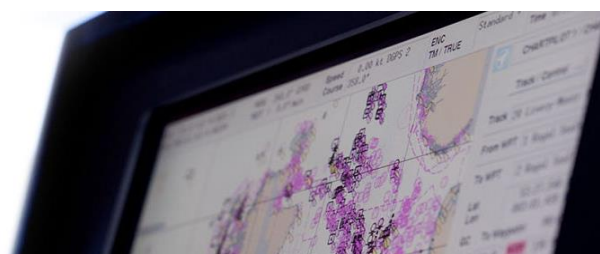
**3.2** Information on UK's chart portfolio is provided on the ADMIRALTY website. Within the EAthC region, the UKHO has published 1 New INT Charts, 2 INT New Editions and 25 INT Adoptions since the last EAthC I 5 meeting (Oct 2018). The breakdown is shown in the table below:

GB Chart Number	INT Chart	Title	Adoption	Published
3104	2804	Greenville to Sassandra	FR7384	01/11/2018
859	1975	Approaches to Mohammedia	FR7705	01/11/2018
91	1812	Cabo de Sao Vicente to the Strait of Gibraltar	ES44	22/11/2018
3325	2922	Estuaire du Gabon	FR7582	29/11/2018
<b>608</b>	<b>1996</b>	<b>River Gambia Entrance</b>		<b>07/02/2019</b>
3108	2871	Grand Bereby to Sassandra	FR7577	18/04/2019
3325	2922	Estuaire du Gabon	FR7582	13/06/2019
1392	2881	Ports and Anchorages in Togo and Benin	FR7587	20/06/2019
141	1972	Approaches to Tanger-Mediterranee	FR7433	05/09/2019
2643	1800	Ile Vierge to Pointe de Penmarc'h	FR7066	10/10/2019
3428	1833	Brest	FR7399	19/12/2019
145	1971	Ports of Tanger Med and Ksar Sghir	FR7707	26/12/2019
1685	1920	Ponta Gorda to Ponta de Sao Lourenco	PT36402	26/12/2019
1145	1852	Santander	ES4011	30/01/2020
2986	1840	Approaches to La Loire	FR7395	13/02/2020
<b>1391[NC]</b>	<b>2882[NC]</b>	<b>Port of Tema</b>		<b>21/05/2020</b>
<b>3102</b>	<b>2876</b>	<b>Takoradi and Sekondi Bays</b>		<b>02/07/2020</b>
1847	1929	Santa Cruz de Tenerife	ES6120	29/10/2020
861	1976	Approaches to Casablanca	FR7700	12/11/2020
1173	1851	Bilbao	ES3941	12/11/2020

1175	1848	Port de Bayonne and Approaches	FR7430	25/03/2021
3103	2873	Port d'Abidjan	FR7576	15/04/2021
88	1903	Cadiz	ES4430	27/05/2021
3101	2872	Outer Approaches to Port d'Abidjan	FR7575	03/06/2021
3224	1882	Approaches to Sines	PT26408	19/08/2021
2664	1804	Pointe de la Coubre to Pointe d'Arcachon	FR7070	16/09/2021
1117	1856	Puerto de Ferrol	ES4123	16/09/2021
3103	2873	Port d'Abidjan	FR7576	23/09/2021
<b>INT Charts to be published in the next six months</b>				
		Unknown at present		
<b>INT Charts scheduled for independent withdrawal in the next six months</b>				
		Unknown at present		

## Digital Charts

**3.3** As noted in Section 3.1, UK's Generic National Report provides information on UK's portfolio of chart products and services. The following paragraphs provide information specifically relevant to the EAtHC region.



## ENCs

**3.4** Within the EAtHC region, the UKHO has released a total of 74 GB ENC cells since EAtHC I 5. The breakdown by usage band is shown in the table below:

**ENC totals by usage band as produced by UKHO**

EAtHC Region Released Cells	
ENC Usage Band	Number of GB ENC's
1	5
2	1
3	25
4	22
5	17
6	4
Total Number of ENCs	74

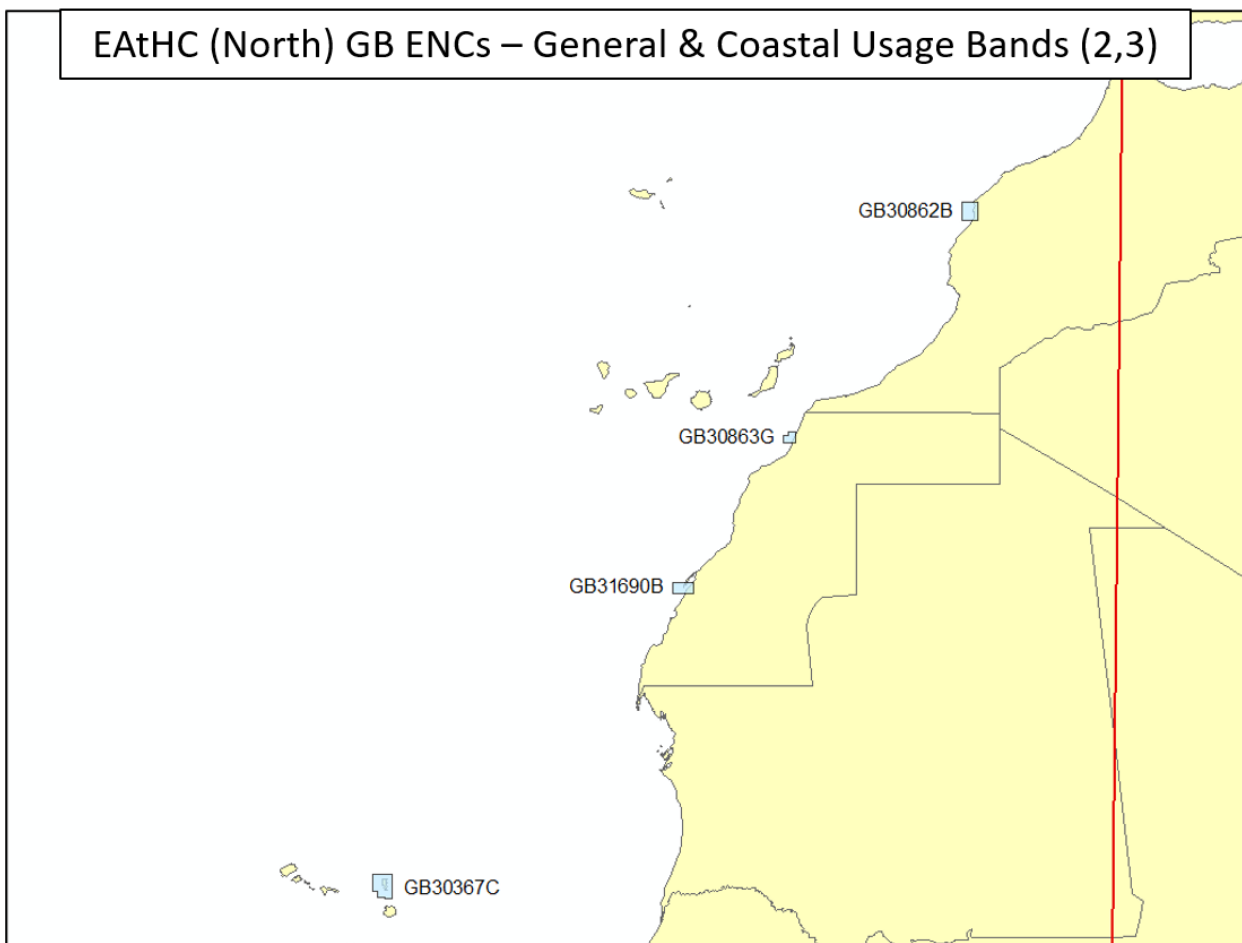
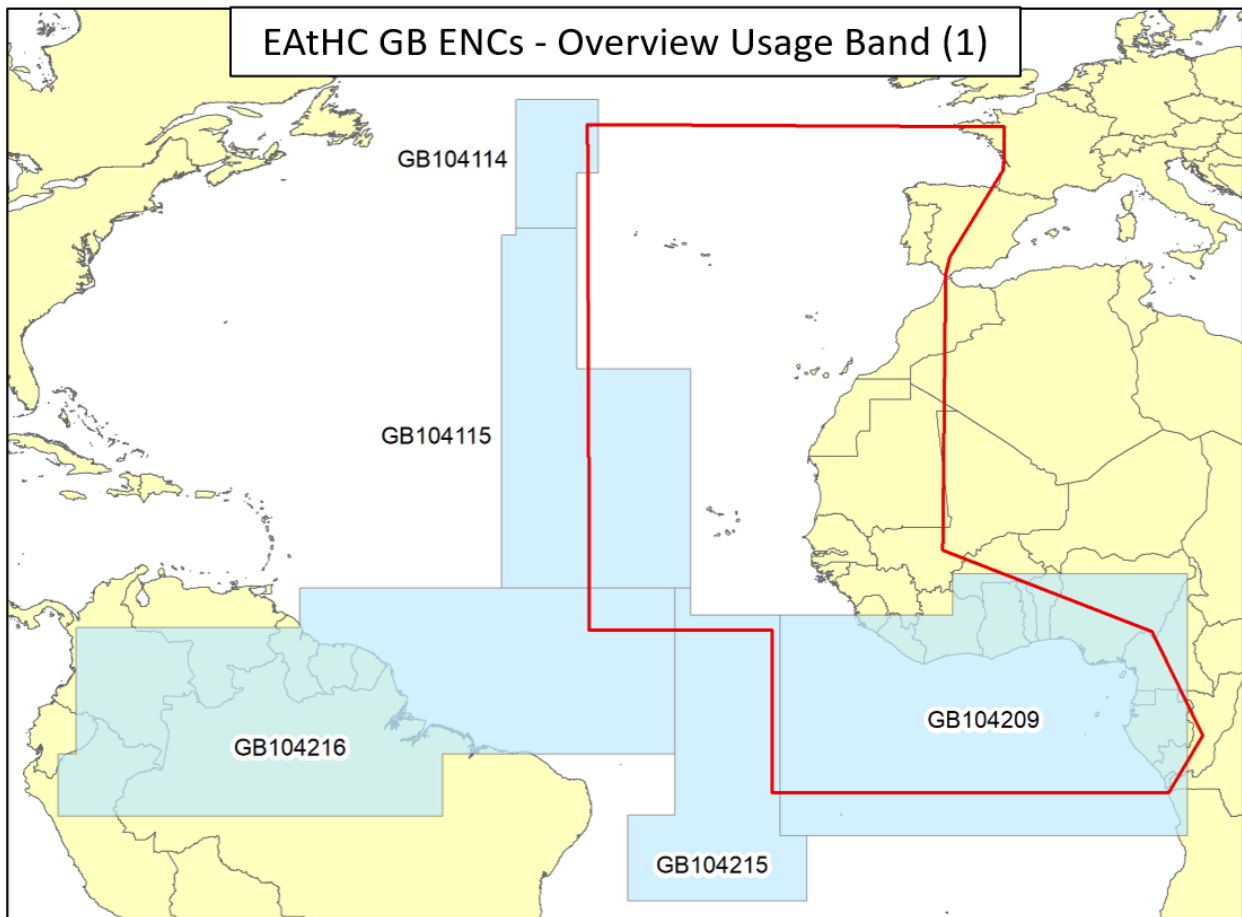
The table below shows new cells in the GB ENC coverage for the EAtHC Region that were released between November 2018 and August 2021.

New GB Cells	Cell Title	Week No.
GB503293	Bonny River - Port Harcourt	27_19
GB501391	Africa West Coast Port of Tema	08_20
GB501242	Dangote Quays	50_20

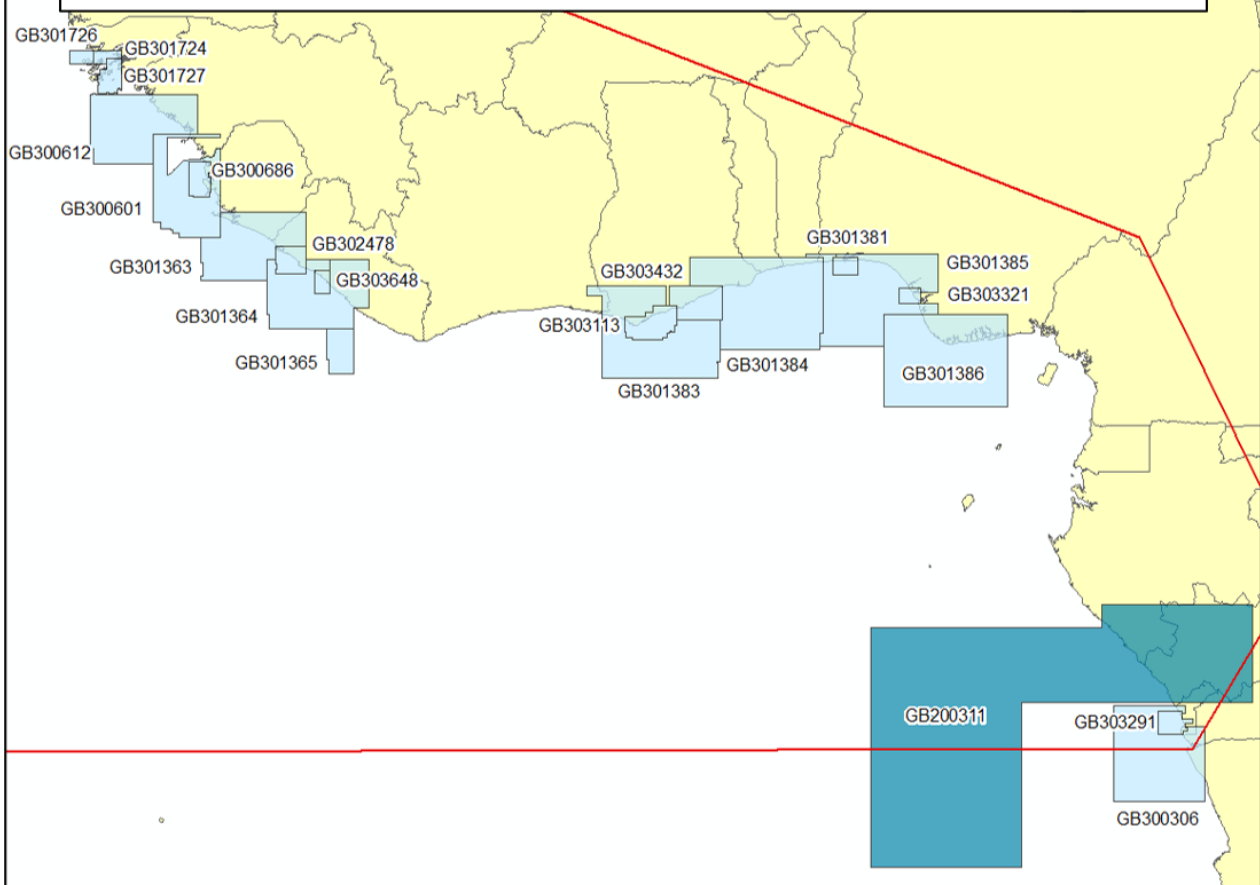
The table below shows cancelled cells and their replacements in the GB ENC coverage for the EAthC Region between November 2018 and August 2021.

Cancelled GB Cells	Week No.	Replacements	
		Cell Name	Cell Title
GB501688	40_18	FR57568A	Mauritanie – Port de Nouakchott – Port de l’Amitié
GB30862A	41_18	FR377010	West Coast of Morocco – Mohammedia to Jorf Lasfar
GB403099	02_19	FR475770	Grand Béréby to Sassandra
GB503099	02_19	FR57577A	San Pedro Harbour
GB603288	27_19	GB503288	Nigeria – Bonny River – Bakana Point to Port Harcourt
		GB503293	Nigeria – Bonny River – Port Harcourt
GB401724	49_19	PT566310	Bissau Harbour
GB51862C	52_19	FR577110	Rade and Port of Safi
GB500863	05_20	FR577130	Rade and Port of Agadir
GB51380E	08_20	GB501391	Africa – West Coast – Ghana – Port of Tema
GB51699A	42_20	FR67833A	Port de Nouadhibou (Port- Étienne)
GB51699B	42_20	FR67833B	Noadhibou Ore Terminal (Cansado)
GB30863B	51_20	FR377080	West Coast of Morocco – From Oued Tensifte to Cap Ghir
GB30863D	51_20	FR377090	West Coast of Morocco – From Cap Ghir to Sidi Ifni
GB40863F	51_20	FR477150	West Coast of Morocco – Agadir approaches
GB502812	51_20	NG525010	Lagos Harbour
GB30367A	51_21	PT364201	Santo Antao – Sao Vicente – Santa Luzia Islands

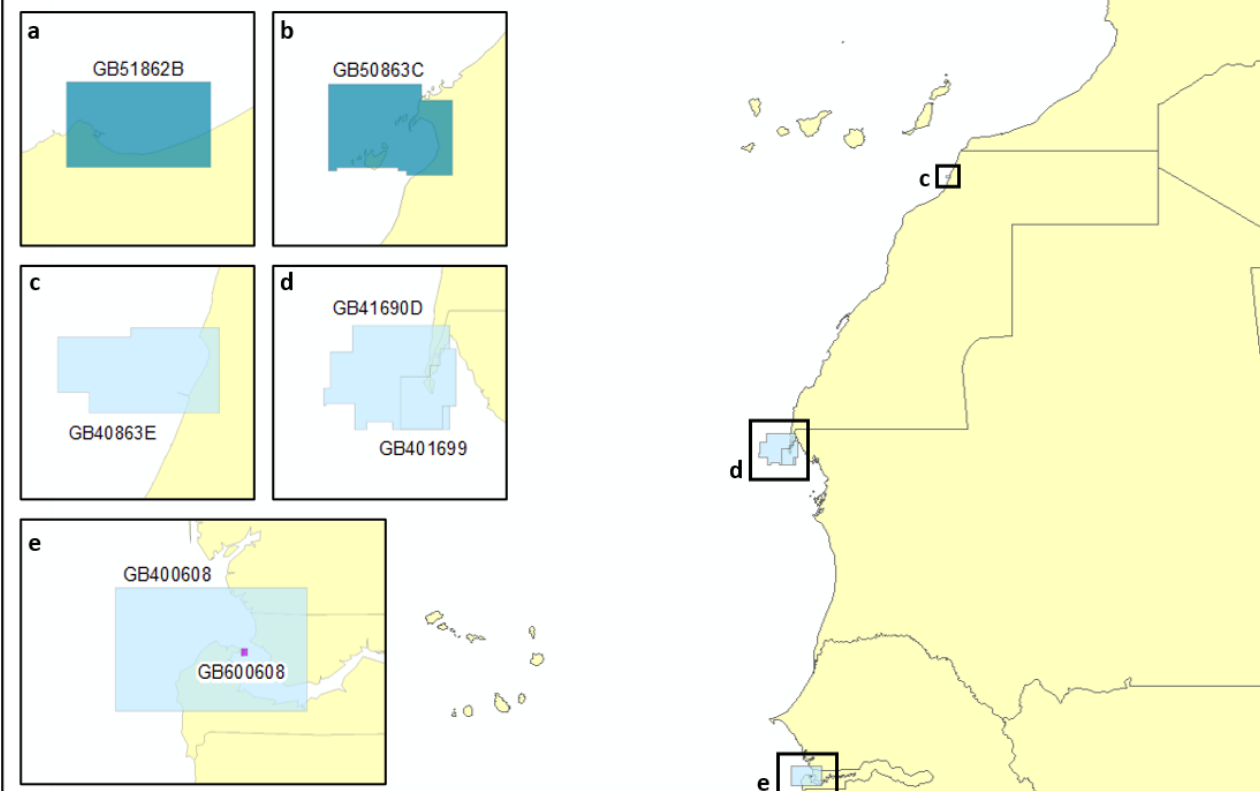
The subsequent figures illustrate the current coverage of UKHO produced GB ENCs within the EAthC.



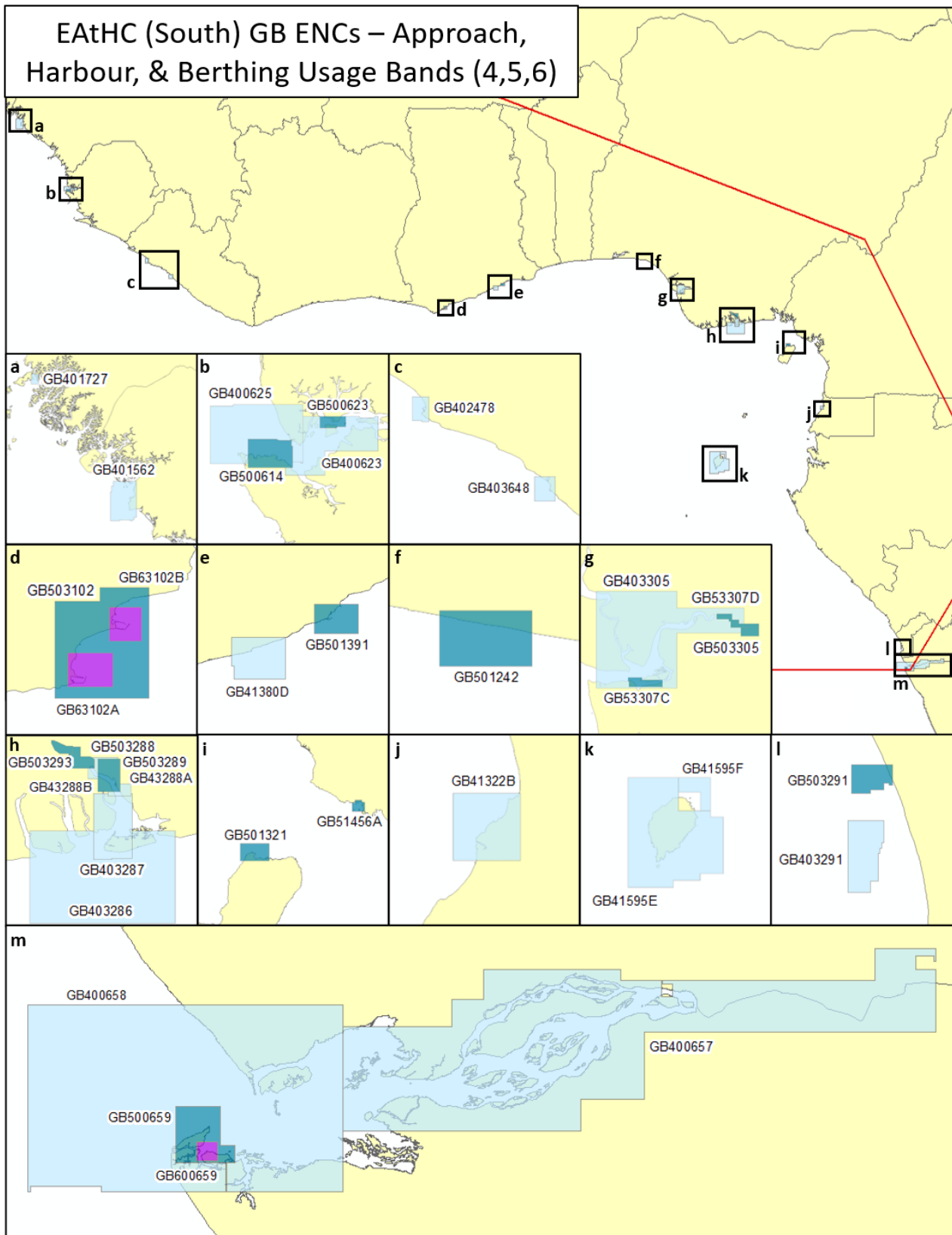
## EAtHC (South) GB ENC – General & Coastal Usage Bands (2,3)



## EAtHC (North) GB ENC – Approach, Harbour, & Berthing Usage Bands (4,5,6)







## ENC Distribution

**3.5** The UKHO, along with other European hydrographic offices, was a founder member of the International Centre for ENC (IC-ENC) Regional ENC Coordination Centre (RENC). IC-ENC concentrates its efforts on the validation and consistency of ENC data and leaves the marketing of ENCs to the shipping industry to its value-added resellers (VAR) and chart agents. Additional details can be found on the IC-ENC website ([www.ic-enc.org](http://www.ic-enc.org)).

The UKHO also acts as a VAR in its own right, particularly promoting a global range of ENC's under the AVCS brand alongside its successful ADMIRALTY range of paper charts and publications. Additional details can be found on the ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)).

## 4. PUBLICATIONS

### Paper Publications

**4.1** The Admiralty Sailing Directions in the EAtHC region are as follows:

NP39 South Indian Ocean Pilot

NP64 Red Sea and Gulf of Aden Pilot

NP3 Africa Pilot Vol 3

NP21 Bay of Bengal Pilot

NP38 West Coast of India Pilot

*New Editions Published since last EAtHC meeting October 2018:*

NP38 West Coast of India Pilot Published 5<sup>th</sup> December 2019

NP 39 South Indian Ocean Pilot Published 24<sup>th</sup> September 2020

NP 64 Red Sea and Gulf of Aden Pilot to be Published 12<sup>th</sup> August 2021

*New Editions to be published:*

None of the above expected for publication in 2022.

These publications are all maintained on a continuous revision cycle and new editions are published every 3-5 years or as required.

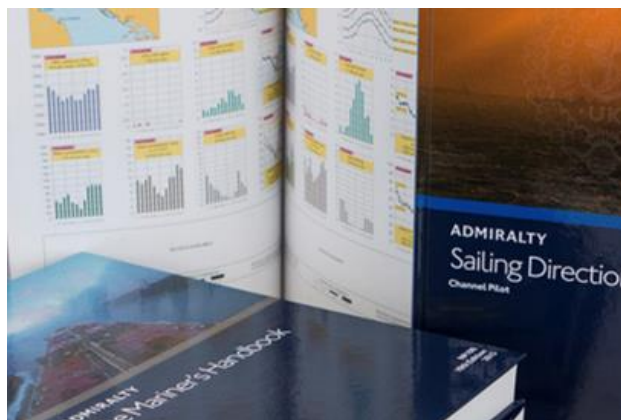
Full details of the other ADMIRALTY publication range and their status can be found on the ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)).

### Digital Publications

**4.2** The UKHO produces a range of ADMIRALTY Digital Publications which are digital versions of ADMIRALTY paper Nautical Publications to support the IMO mandate of ECDIS. These publications provide mariners with additional functionality, are subscription-based and automate the task of updating through Notice to Mariners.

- **ADMIRALTY e-Nautical Publications (AENP):** e-Book versions of ADMIRALTY Sailing Directions and reference publications.
- **ADMIRALTY Digital List of Lights (ADLL):** Digital versions of ADMIRALTY lights publications.
- **ADMIRALTY TotalTide (ATT):** Digital versions of ADMIRALTY tidal publications.
- **ADMIRALTY Digital Radio Signals (ADRS):** Digital versions of ADMIRALTY radio signal publications.

**4.3** The **ADMIRALTY Digital Catalogue (ADC)** can be downloaded free from the ADMIRALTY website ([www.admiralty.co.uk](http://www.admiralty.co.uk)). It includes details of all paper and digital charts and publications and is



updated weekly. It is a useful tool to check chart coverage within the region, and to show the latest edition dates of both charts and publications.

## **5. MSI**

**5.1** UK maintains close liaison with NAVAREA II Coordinator. Any information received at UKHO which requires urgent promulgation is passed to the respective NAVAREA Coordinator on a 24-hour basis. All administrations are encouraged to promulgate their MSI in a timely manner. This can be achieved by utilising existing National Co-ordinators for MSI within each littoral state in the region and fostering direct liaison with NAVAREA Coordinator for Navigational Warnings and with Regional Hydrographic Offices.

**5.2 Notices to Mariners.** Assistance with promulgating Notices to Mariners and other paper and electronic chart correcting material should also be encouraged through co-operation with other hydrographic offices in the region if required. The current Admiralty weekly Notices to Mariners are now supplemented by daily updates; these are available on the UKHO website.

## **6. C-55 LATEST UPDATE**

**6.1** As described in the UK Generic National Report, UK is committed to providing regular updates to the C-55 entries for UK Home Waters. The latest status is correctly outlined within C-55.

**6.2** UK has also provided assistance to other countries to update C-55 entries where UKHO retains the primary charting responsibility (Gambia, Ghana, Liberia, Nigeria & Sierra Leone); recognizing that local input remains critical to the maintenance of C-55 as an up-to-date and authoritative reference document.

## **7. CAPACITY BUILDING**

**7.1** The UK fully supports the IHO Capacity Building Sub-Committee (CBSC) strategy, particularly its emphasis on getting Phase 1 and appropriate Phase 2 capacity in place to enable coastal states to meet their obligations under SOLAS Chapter V Regulations 4 and 9. The UK will continue to contribute resources to both CBSC initiatives and to providing bilateral assistance.

**7.2** The UKHO has a post dedicated to International Capacity Building. Its key aims are to ensure that capacity building is properly considered in the UKHO activity and that the UKHO's capacity building activities are fully coordinated. It acts as the initial point of contact for the UKHO involvement in IHO capacity building activities, including UK involvement in regional hydrographic commission initiatives and IHO CBSC activities.

### **Cartographic Training provided by UKHO**

**7.3** The UKHO provides two annual CAT B accredited nautical cartography training opportunities to FGHO students. These are the IHO-NF GEOMAC Project course which is funded by the Nippon Foundation and the newly established UKHO course. Applications for the Nippon Foundation course are by responding to the IHO Circular Letter. The UKHO invites



participants to its version of the course as part of bilateral arrangements. The UKHO continue to monitor the ongoing COVID-19 pandemic and hope to resume face to face international training as soon as possible.

The UKHO recognises the importance of continued training and to enable continued activity have developed a new Learner Management System (LMS). The LMS acts as the learning portal for training, offering all delegates ease of access to online seminars and interactive learning material. As a result of this the UKHO are currently running a series of virtual courses which started with an introductory series in March 2021. The first phase of this blended learning has seen 1,960 delegates places being assigned during a five month period, studying across three topics:

- Compiling for Navigational Safety

- Introduction to S-57
- Understanding ENC's.

As a result of customer and stakeholder feedback the following courses are under development and will be offered across the network in the future:

- Introduction to/unpacking of S-I 00
- Chart Awareness

## **ENC Training and Assistance**

**7.4** The UKHO strongly supports the successful uptake of ECDIS using ENC, and is happy to assist other nations to produce, maintain and distribute ENC's. Details of courses, sponsorship, venues and options for bespoke training provided by the UKHO are included in the UK Generic National Report.



## **Survey Training at Commander Fleet Operational Training - Hydrography, Meteorology and Oceanography**

**7.5** Nationally and internationally certified courses delivered by Commander Fleet Operational Training in Plymouth, are described in the UK Generic National Report.

## **8. OCEANOGRAPHIC ACTIVITIES**

**8.1** The UK participates on the IOC-IHO Guiding Committee for GEBCO, to support GEBCO's aim to provide the most authoritative, publicly available Bathymetric data sets for the world's oceans.

**8.2** The UKHO participates in and Chairs the IHO Tides, Water Levels and Surface Currents Working Group (TWCWG). Part of the WG activities involve Member States activities and experiences with long term [permanent] 'National' Tide Gauge Networks.

The UKHO is not directly tasked with owning and operating these at the UK national level – this is the remit of the National Tidal and Sea Level Facility (NTSLF, [www.ntsrf.org](http://www.ntsrf.org)) operated by the UK Environment Agency.

However, under the auspices of the Overseas Territories Seabed Mapping Programme (OTSMP), the UKHO has been working with external contractors to establish permanently installed tide gauges in Overseas Territories including to date Bermuda and the Turks and Caicos Islands. As well as being an essential part of the OTSMP work, they form an integral and important contribution to global sea level monitoring networks. Such permanent installations, are instrumental for the scientific study of long term sea level rise. In addition they can form part of tsunami warning systems and also provide essential observations for use in coastal inundation (storm surge) modelling studies. It is the UKHO's intent to further expand this network under the OTSMP, Commonwealth Marine Economies Programme (CMEP), and any future overseas work under other programmes.

**8.3** Further details are described in the UK Generic National Report.

## **9. SPATIAL DATA INFRASTRUCTURES**

**9.1 Status of MSDI.** The UKHO has recently adopted the UNGGIM IGIF as a means of auditing its work so far in establishing an MSDI and prioritising future activities. The UKHO's aspiration is to have established itself as the de-facto owner of the UK's MSDI by 2022. This aspiration has led to a review of the UKHO's internal data platforms and Marine Data Portal.

**9.2 Relationship with the NSDI.** The UK does not yet have a recognised NSDI however, a UK Geospatial Commission was established in 2017 with partner bodies consisting of several national geospatial agencies, including the UKHO. This Commission is focused on unlocking the value of geospatial data within the UK and is currently establishing a UK Geospatial Strategy which is likely to form the foundation of a NSDI soon. The Commission is currently supporting several collaborative projects being undertaken by the UKHO which all have strong links to NSDI principles.

**9.3 Involvement in regional or global MSDI efforts.** The UKHO is an active member of the UNGGIM and OGC groups which contribute towards Global MSDI activities and methodologies. The UKHO is also a member of the IHO MSDI Working Group as highlighted in Para 11.7 of this document as well as most of the MSDI Working Groups within the Regional Hydrographic Commissions for which the UKHO has membership of. The UKHO represents the UK on the UNGGIM Working Group on Marine Geospatial Information and has recently agreed to lead UK input into the UNGGIM-Americas Caribbean Geospatial Development Initiative (CARIGEO).

We are actively working at creating a domain with the appropriate standards to support national and international MSDIs, a good example is our sponsorship of S-121 a pilot project to develop a standard for the exchange of Maritime limits and boundaries.

**9.4 National implementation of the Shared Data Principles - including any national data policy and impact on marine data.** The UKHO is actively engaged with a project directed by the UK Geospatial Commission to improve the handling and publication of Government datasets. This work involves improving the discoverability of data as well as working towards a set of shared principles within UK Government. The UKHO also continues to produce Electronic Navigational Charts to the IHO S-57 standard which contains a defined structure for metadata and the modelling of maritime related features. Work is ongoing to transition to the future IHO S-100 standards.

**9.5 MSDI national portal.** The UKHO has a Marine Data Portal which continues to grow and develop. As the organised gateway to our non-navigation data and services it gives people easy and timely access to marine location-based information from seabed to surface to help them with sustainable marine decision making. The Portal allows users access to several free of charge datasets and services mainly covering the UK territorial waters. The Portal provides access to premium data sets which can be purchased. The underlying Marine Data Portal technology has the capability to host other agencies', or even other nation's datasets.

**9.6 Best practices and lessons learned.** The UKHO, via the UK Geospatial Commission, is leading on a limited-scope Governance project to inform, guide and direct effective joint working between the participating UK agencies. The project will draw upon suggested Best Practices as represented via the UNGGIM IGIF with a focus on technology-agnostic Governance between formal institutions, which may be extended across the Geospatial Commission in due course subject to circumstances.

*The UKHO is currently collaborating with one of its Primary Charting Authorities to develop an MSDI Data Management Solution on their behalf, to aid in making geospatial data more widely discoverable, accessible and usable. It is hoped this will be made available to a select group of users within the PCA for use by the end of November, and lessons learnt will directly inform further MSDI Professional Services available from the UKHO.*

**9.7 Challenges and achievements.** As part of the UK Geospatial Commission collaborative projects, the UKHO and other partners have made more public geospatial data available through a government hosted website [data.gov.uk](https://data.gov.uk) and are now:

- Looking at ways of standardising data licensing agreements;
- Improving the discoverability of national geospatial data;
- Providing guidance to better link geospatial data sets; and
- Increasing the range of data which is ingested.

## **10. INNOVATION**

**10.1** The UKHO has launched its new ADMIRALTY Marine Innovation Programme, spearheaded by the UKHO's Research, Design and Innovation team. The programme will give innovators and start-ups a chance to develop new solutions that solve some of the world's most pressing challenges when it comes to our oceans. The launch of this Programme follows extensive research commissioned by the UKHO into the Blue Economy, which is estimated to be worth £3.2 trillion by the year 2030.

**10.2** Successful innovation programme participants will develop their own solutions for these areas, using ADMIRALTY data sets that range from seabed composition samples and bathymetric profiles of the seafloor, to tidal and navigational information. Entrants to some challenges will also work alongside



leading experts in research, design and development at the UKHO, with winners receiving an opportunity to launch their products into some of the world's fastest growing marine sectors.

**10.3** The themes for this year's Programme are as follows:

- Unlocking Autonomous Vessel Navigation;
- Transforming Maritime Risk & Insurance;
- Identifying Suitable Areas for Offshore Renewable Energy; and
- Open Innovation in Blue Carbon Sequestration Areas.

## **11. OTHER ACTIVITIES**

### **UK Celebrations for World Hydrography Day (WHD)**

**11.1** The UKHO celebrates World Hydrography Day 2021 by producing a short film to showcase the UKHO's rich history of partnerships. This includes the 140 collaborative partnerships established across the globe and our Primary Charting Authority responsibilities for 71 coastal states, to the work carried out through our International Hydrographic Programmes and International Training. The theme this year is "*100 years of international cooperation in hydrography*" and a link to the film can be found [here](#). In 2021, UKHO recognised the achievements of the US National Oceanic and Atmospheric Administration's Office of Coast Survey (OCS) team with the Alexander Dalrymple Award. In January 2021 UKHO hosted a virtual ADMIRALTY Blue Data Conference focused on "Enabling Autonomous Technologies."

### **Broader UK Government Work**

**11.2** The UK Member State, consisting of the UK, the Overseas Territories and Crown Dependencies, will be audited in 2021 (delayed slightly from late 2020 due to issues surrounding COVID-19) against the IMO Instrument Implementation Code's (IICC) and Mandatory IMO Member State Audit Scheme (MIMSAS). This has raised awareness of the importance of maritime compliance and the benefits to everyone. To complement the work of the UKHO's OT Seabed Mapping Programme, the UK Maritime and Coastguard Agency have a UK Government aid funded programme to review maritime obligations compliance, search and rescue and oil pollution response.

**11.3** The Commonwealth Litter Programme (CLiP), is led by the UK through the Centre for Environment Fisheries and Aquaculture Science (Cefas). Funded by the UK Department for Environment, Food and Rural Affairs, the programme will support four developing countries across the Commonwealth to take action on plastics entering the oceans. The programme will contribute to the UK meeting its responsibilities under the Commonwealth Blue Charter, which calls for Commonwealth countries to drive action and share expertise on issues affecting the world's oceans, including marine litter. CLiP will contribute to delivering the objectives under the UK and Vanuatu-led Commonwealth Clean Oceans Alliance (CCOA), which calls on other countries to pledge action on plastics. CCOA also promotes actions in line with the United Nations Sustainable Development Goal 14 (life below water) to conserve and sustainably use the oceans, as well as contributing to the UK Government's 25 Year Environment Plan. The programme will work in the South Pacific, Caribbean and Africa. In May 2019, work began in Belize.

The programme encompasses the following five pillars:

- Land based sources of litter;
- Sea based sources of litter;
- Removal of litter from the marine environment;
- Science and Education; and
- Outreach.

**11.4** The UK's Joint Nature Conservation Committee continues its work in the Overseas Territories, providing technical assistance to support biodiversity and wider environmental management strategies and scientific advice. Their UK Government aid funded programme, Natural Capital in the Caribbean and South Atlantic Overseas Territories, uses economic assessments and analysis, spatial mapping and satellite data to provide an assessment of natural capital in the UK's Caribbean and South Atlantic

Overseas Territories.

**11.5** The 2020s have been designated by the United Nations as the Decade of Ocean Science for Sustainable Development. In addition, the UK hosted this year's G7 summit which took place in Cornwall; 11-13 June 2021. This summit released the Carbis Bay G7 Summit Communique, which made reference to the importance of our oceans and the G7 at the 2018 summit in Charlevoix, Canada also recognised the importance of the oceans by publishing the Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities. Seabed Mapping is a key component to both. The UK has now taken on the Presidency of this year's G7 summit which is being hosted in Cornwall; 11-13 June 2021. This summit seeks to continue the narrative of creating a sustainable and prosperous future for our global ocean. This theme will then continue into the COP26 UN Climate Conference in November 2021, which is also being hosted by the UK Government, in Glasgow.

**11.6** In 2019, the UK Department for Transport published its *Maritime 2050 (M2050) Navigating the Future strategy*. Along with the Government Office for Science's (GO Science) Foresight Future of the Sea Report, M2050 recognises the critical role of the maritime sector for the growth and development of the UK, including its Overseas Territories, as a primary facilitator of global trade. Both pivotal documents also recognise that marine geospatial data is essential to unlocking a sustainable and prosperous global blue economy and that the UKHO is a world leading authority in this area. The UKHO is currently working to bring together all the stakeholders in the UK's Marine Geospatial Community to ensure we have a comprehensive and inclusive approach to pursuing and developing opportunities to deliver against national and international priorities.

### The UKHO's International Activities

**11.7** Due to the UKHO's technical expertise, primary charting responsibilities and UK OTs, the UK is represented at the following groups:

International Hydrographic Organization - HSSC		Chair/Vice Chair	Member
HSSC	Hydrographic Services and Standards Committee		x
DQWG	Data Quality Working Group		x
ENCWG	ENC Standards Maintenance Working Group	x	x
NCWG	Nautical Cartography Working Group	x	x
NIPWG	Nautical Information Provision Working Group		x
S-100WG	S-100 Working Group		x
TWCWG	Tides, Water Level & Currents Working Group	x	x
HSWG	Hydrographic Survey Working Group	x	x
ABLOS	Advisory Board on the Law of the Sea		x
International Hydrographic Organization - IRCC		Chair/Vice Chair	Member
IRCC	Inter-Regional Coordination Committee		x
CBSC	Capacity Building Sub-Committee		x
CSBWG	Crowd-sourced Bathymetry Working Group		x
MSDIWG	Marine Spatial Data Infrastructure Working Group		x
WENDWG	Worldwide ENC Database Working Group		x
WWNWS	Worldwide Navigational Warning Service		x
GEBCO	General Bathymetric Chart of the Oceans		x
HCA	Hydrographic Commission on Antarctica		x
MACHC	Meso American and Caribbean Sea Hydrographic Commission	x	x
MBSHC	Mediterranean and Black Seas Hydrographic Commission		x
NIOHC	North Indian Ocean Hydrographic Commission		x
NSHC	North Sea Hydrographic Commission		x
RSAHC	ROPME Sea Area Hydrographic Commission		x
SAIHC	Southern African and Islands Hydrographic Commission	x	x
SWPHC	South-West Pacific Hydrographic Commission		x
EAtHC	Eastern Atlantic Hydrographic Commission		Observer

<b>International Maritime Organization</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
NAVTEX	NAVTEXT Coordination panel	x	x
<b>International Association of Marine Aids to Navigation and Lighthouse Authorities</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
ENAV	E-navigation Committee		x
<b>Other International Bodies</b>		<b>Chair/Vice Chair</b>	<b>Member</b>
IAU	International Astronomical Union		x
CIRM	Comité International Radio-Maritime		x
BALTICO	Navarea I member states meeting		x
ISO	International Standards Organisation		x
OGC	Open Geospatial Consortium		x
UNGGIM WGMGI	UNGGIM Working Group on Marine Geospatial Information		x
CARIGEO	Caribbean Geospatial Development Initiative		x

## 12. CONCLUSION

The UKHO continues its commitment to carrying forward hydrographic activities through the work of the IHO's Regional Hydrographic Commissions, and notes that each commission has its own particular opportunities and challenges. We continue to support EAtHC, including support to the regional Capacity Building coordinator.

There remains a continuing challenge to link the scarce local data gathering resources into a broad programme of prioritised products.

When EAtHC15 met in Lagos in October 2018, none of us could have predicted the way in which the COVID-19 pandemic would transform the world and much has changed in fifteen months. The global pandemic and associated economic shock has required us all to focus on critical activities while taking extra care to sustain one another during a most uncertain and rapidly evolving situation.

One area which has remained constant for the UKHO, and indeed the wider hydrographic community, is our commitment to serving the needs of the mariner. We have witnessed outstanding professionalism and enormous dedication across the world. Long may this continue.

While adhering to UK Government guidelines to minimise the spread of COVID-19, UKHO implemented a range of precautionary measures including staff moving to a 'working from home' arrangement. We formalised our approach to prioritisation, recognising the critical importance of SOLAS and related products. In this regard, UKHO continues to enable safer navigation by revising and maintaining existing paper and electronic portfolios of charts and publications; and introducing new adoptions, New Charts, New Editions and New Cells, where appropriate.

The challenges of the year mean that we did not achieve everything we set out to do, with some plans curtailed, others postponed and zero opportunity for in-person engagement with our partners and colleagues. However, new ways of working have also provided opportunities to innovate. Our Innovation Programme offers significant opportunity for the non-navigational use of hydrographic data and gives tangible opportunities for the identification and best use of our technical acumen to mitigate the impact of shipping on our planet. Notwithstanding and indeed by way of mitigating the ongoing challenges of the pandemic, in 2021 UKHO started to deliver a range of new, online courses to support the ability of Member States to maintain safety and efficiency of maritime navigation.

**UKHO Taunton**  
**August 2021**



## **UKHO POINTS OF CONTACT**

**UKHO Website:** [GOV.uk/UKHO](https://gov.uk/UKHO)

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Input to the IHO Publication P-5 (Yearbook)  
United Kingdom of Great Britain and Northern Ireland

<b>Country information / Informations sur le pays/ Información sobre el país</b>	
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	40,631,143 tons
National day -Fête nationale -Fiesta nacional	Second Saturday in June (Trooping the Colour)
-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	21/06/1921
-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	03/05/1967
Official Representative to IHO (as designated by Member Government) <b>UNITED KINGDOM HYDROGRAPHIC OFFICE</b>	
<b>Contact information/ Informations de contact / Información de contacto</b>	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	RAdm Rhett Hatcher – National Hydrographer & Director of Defence & Data Acquisition Postal address: Admiralty Way TAUNTON Somerset, TA1 2DN United Kingdom Tel: + 44 (0) 1823 484444 Fax: + 44 (0) 1823 284077 E-mail: IBTE@UKHO.gov.uk
Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	
-Web site -site web -sitio web	<a href="http://www.gov.uk">http://www.gov.uk</a>
<b>Agency information</b>	
Date of establishment	12 August 1795
Relevant National Legislation	TS Baseline 25.09.64 12nm TS Limit 15.05.87 200nm EFZ 22.12.76
Top level parent organization	Ministry of Defence
Principal functions of the organization or the department	Publication of analogue and digital navigational charts and supporting publications, transmission of maritime safety information, Notices to Mariners (weekly), provision of geodetic, oceanographic and geophysical data and publications

	to meet defence requirements. Provision of tidal information and Ocean currents.
Number of INT charts published	970
Total number of paper charts	3500 (Approx)
Number of ENC cells published	1771 GB cells
Number of Raster Charts	582
Number of Other Charts	52
Type of publications produced	Full suite of Admiralty Charts and Publications including some digital products. For details see UK Catalogue of Admiralty Charts and Publications (NP131) or the UKHO web site: <a href="http://www.gov.uk/UKHO">http://www.gov.uk/UKHO</a>

Other Organizations providing national Hydrographic Services  
Autre Organismes fournissant des services hydrographiques au niveau national.

**CAPTAIN HYDROGRAPHY & METEOROLOGY AND  
HYDROGRAPHER OF THE NAVY**

Contact information / Informations de contact / Información de contacto			
Head of the Hydrographic Office (if different from the person indicated above) -Directeur du service hydrographique (si différent de la personne indiquée ci-dessus) -Jefe del Servicio Hidrográfico (si es diferente de la persona indicada anteriormente)	Head of Hydrographic Office – Royal Navy. Capt(HM)/Hydrographer of the Navy Capt.(HM) Derek RAE* Tel: + 44 (0) 1752 555780 Fax: + 44 (0) 1752 555844 E-mail: navydevflot-capthmhofn@mod.uk or <u>Derek.rae531@mod.gov.uk*</u>		
Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	Postal address: COMDEVFLOT, Room 260, Defiance Building HM Naval Base Devonport, PLYMOUTH, Devon, PL2 2BG, United Kingdom of Great Britain and Northern Ireland		
Agency information / Information sur l'agence / Información sobre la agencia			
Top level parent organization -Organisme mère -Organización asociada de nivel superior	Ministry of Defence – Fleet Commander		
Principal functions of the organization or the department -Attribution principales de l'organisme ou du département – Principales funciones de la Organización o el departamento	Commander of RN ships, units and personnel engaged in collection analysis and dissemination of all forms of geospatial information through the hydrographic, meteorological and oceanographic disciplines.		
Detail of surveying vessels/ Aircraft -Détail des bâtiments hydrographiques/aéronefs -Detalle de buques hidrográficos/Aeronaves	Displacement -déplacement -Desplazamiento	Commissioning Date -date de mise en service - Fecha de puesta en servicio	Crew -équipped -Personal

HMS SCOTT (H131)	13500	1997	63
HMS PROTECTOR	5000	2011	88
HMS ECHO (H87)	3470	2002	72
HMS ENTERPRISE (H88)	3470	2002	72
HMS MAGPIE (H130)	37	2018	12
Other information of interest -Autres informations utiles -Otra información de interés	<p>HM personnel are also borne in other RN vessels. Capt(HM) directs all hydrographic, meteorological and oceanographic support to the fleet. The programme for Civil hydrography in UK waters is managed by the Maritime &amp; Coastguard Agency and is outsourced to the commercial sector.</p> <p>Training in hydrographic surveying and meteorology is provided for naval personnel by the Commander Fleet Operational Training - Hydrography, Meteorology and Oceanography</p> <p>HMS DRAKE HM Naval Base</p> <p>Devonport</p> <p>PLYMOUTH</p> <p>Devon PL2 2BG</p> <p>Details of courses are available at:</p> <p><a href="http://www.mod.uk/DefenceInternet/AboutDefence/Whatwedo/TrainingandExercises/IDT/IDTRN">www.mod.uk/DefenceInternet/AboutDefence/Whatwedo/TrainingandExercises/IDT/IDTRN</a></p>		